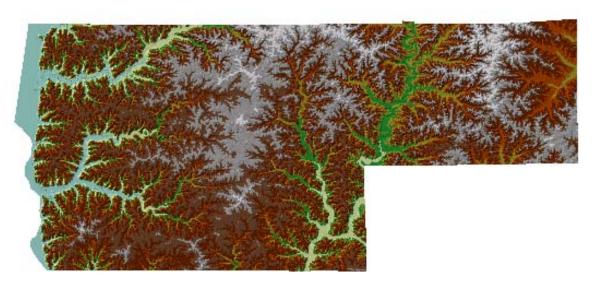
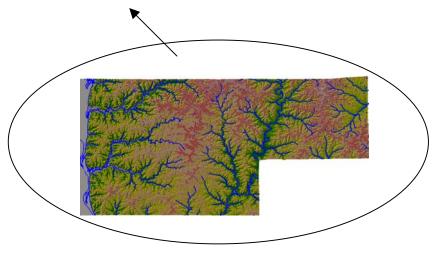
# Vernon County Wisconsin

**COUNTY - WIDE PLAN** 

For

## Land Records Modernization (MAY 2005 UPDATE)





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#### I. EXECUTIVE SUMMARY

#### A. Identification:

Vernon County, Wisconsin Land Information Office Kelly R. Jacobs, Project Manager - GIS Specialist

#### B. Participants:

Jim Parr Jim Servais County Board Member County Board Member E 10802 Kempf Road E 2560 Hamburg Ridge Rd. La Farge, WI 54639 Stoddard, WI 54658

Raymond Moser Judy Wilmes County Board Member County Board Member E 9308 Lyster Rd. E 7501 Moser Ave. Viroqua, WI 54665 Readstown, WI 54652

Trent Strang Hugh Harper Vernon County Zoning Assessor P.O. Box 306 S 7043 Aikens Rd. Viroqua, WI 54665 Readstown, WI 54652

Lee Nerison Ron Hoff County Board Chairman Vernon County Clerk Courthouse Annex; Room 307 Viroqua, WI 54665 Viroqua, WI 54665

Jeff Hastings Vernon County Conservationist 220 Airport Rd Viroqua, WI 54665

Courthouse Annex; Room 108 Kelly Jacobs

Project Manager - GIS Specialist 220 Airport Rd Viroqua, WI 54665

Dean Steinmetz County Board Member 213 East Penn St La Farge, WI 54639

Konna Spaeth Vernon County Register of Deeds P.O. Box 46 Viroqua, WI 54665

Rachael Hanson Vernon County Deputy Treasurer P.O. Box 49 Viroqua, WI 54665

Curt Cummer Vernon County Surveyor 104 ½ Coon Prairie Ave Westby, WI 54667

#### C. Summary:

This revision of the 1999 Land Records Modernization Plan Update for Vernon County is based on the September 1, 1997 uniform instructions for preparation of land information modernization and information plans. This revision takes both the framework established in the original 1994 plan and its 1999 update to set relevant goals, objectives, and activities as we continue to progress in the acquisition and development of land information libraries in Vernon County. The original plan's goals were ambitious and comprehensive, and do remain in effect for this revision. The following are highlights of activities.

- 1. Communication, Education & Training Continue raising awareness especially among decision makers
  - Distribute information to local municipalities within the county and train them in the use of the information
- 2. Geographic Framework Continue remonumentation
- 3. Parcel Mapping Acquisition of software and dedication of staff time
- 4. Parcel Administration Integration of tax data into relational database.
- 5. Public Access Register Of Deeds Optical Character Recognition project; website development
- 6. Zoning Mapping Digitizing FEMA maps; determine LIDAR needs
- 7. Soils Mapping Coordination and cooperation with NRCS on anticipated soil survey update
- 8. Wetland Mapping Digitizing and acquiring information from WI-DNR/ USDA-NRCS/ US Department of Interior maps
- 9. Institutional Arrangements Coordination and networking of Treasurer and Register of Deeds.
- 10. Reconciled Boundaries Automate and digitize voting districts based on 2000 census.
- 11. Reconciled Addresses Automate and digitize emergency numbering system.
- 12. Land Use Develop Department of Revenue land use classification layer
- 13. Natural Resources Continue coordinating and integrating with other layer holders (DNR, NRCS, Kickapoo Reserve, etc.)
- 13. Data Base Design Continue and expand utilization of the ESRI products
- 14. Infrastructure & Facility Mgmt. Continue relationship with DOT-5, KRMB, etc.

#### II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

#### A. GOALS AND OBJECTIVES OF INFORMATION/SYSTEM INTEGRATION

- **1. Goal** Make the use of geographic information commonplace among County Departments and the general public.
  - a. Objective Network computer work stations in all relevant County Departments
    - 1. Task Install necessary hardware by 2008.
    - 2. Task Install necessary software by 2008.
    - 3. Task Train users in late-2008.
    - 4. Task Provide for ongoing maintenance of system.
  - **b.** Objective Establish a common computing platform for geographic information analysis.
    - 1. Task Integrate ArcReader into daily workflow of decision-makers by 2007.
    - 2. Task Secure funding for maintenance and upgrade of hardware and operating system throughout plan period.
    - 3. Task Integrate ArcGIS into daily workflow of intensive users by 2007.
    - 4. Task Annual training of users on maximizing use of GIS software.
  - **c. Objective** Expand utilization of geographic information by other County Departments.
    - 1. Task Place orthophotography and GIS software in the Highway Department by 2006.
    - 2. Task Place orthophotography and GIS software in the Sheriff's Office by 2006.
    - 3. Task Begin implementation of GIS based Emergency Response by 2008.
    - 4. Task Place orthophotography and GIS software in the Register of Deeds Office by 2005.
    - 5. Task Automate tax parcel mapping process, completing base map by 2007
    - 6. Task Complete integration of GIS for resource conservation planning in the Land & Water Conservation Department by 2002.
  - **d. Objective** Provide public viewing of land records via remote access technologies.
    - 1. Task Develop a privacy policy for any sensitive information (i.e. associated with individual landowner contracts).
    - 2. Task Develop interface for public access by 2010.
    - 3. Task Purchase necessary computer hardware and software to serve public access needs by 2009.
    - 4. Task Purchase computer hardware and software for establishment of public viewing stations by early-2009.
    - 5. Task Promote awareness of remote access of land records with periodic information sessions, presentations to civic groups and newspaper articles.
- **2.** Goal Meet statutory requirements and legal responsibilities for PLSS.
  - a. Objective Remonument a minimum of 100 section corners each year.
    - 1. Task Select contract surveyor using competitive bidding process
    - 2. Task Review of contracted products by County Surveyor.
    - 3. Task Continue the bounty program to acquire additional section corners.
  - **b. Objective** Continue and expand the role of County Surveyor.
    - 1. Task Demonstrate need for full-time function to decision makers through annual presentations to the County Board.

- 3. Goal Maintain high quality digital orthophotography
  - a. Objective Update orthophotography in 2005 and distribute to local municipalities.
    - 1. Task Acquire Digital Orthophotography layers via the Southwest Wisconsin Digital Orthophotography Consortium negotiations
    - 2. Task -- Provide Land Information (GIS and Aerial Photography), upon request, to Municipalities within Vernon County.
    - 3. Task Provide High Resolution Orthophotography options to local municipalities within Vernon County.
    - 4. Task Build relationships with neighboring counties to provide Land Information coverage to municipalities on or near the county border.
  - **b.** Objective Update orthophotography by 2015.
    - 1. Task Secure annual contributions from Land Information Committee Budget sufficient to build a fund that will meet 80% of the expected costs.
    - 2. Task Determine mode of photography capture (satellite, aerial; full coverage, etc.) one year prior to letting contract.
    - 3. Task Maintain relationship with Southwest Wisconsin Digital Orthophotography Consortium.
    - 4. Task Select vendor for acquiring photography using competitive bidding process.
- **4.** Goal Bring Vernon County into compliance with Phase II Wireless 911
  - a. Objective Update/create GIS products by December 2008
    - Task Research, construct and maintain PLSS network using Vernon County Coordinates on section and quarter section corners, then constructing section and forty grids in accordance, using standards set in the 2000 WLIA "PLSS Database Definitions."
    - 2. Task Research, construct and maintain Parcel Mapping in accordance with "Cadastral Parcel Mapping" standards in the 1999 WLIA Standard Digital Parcel Mapping Standard and the 1995 WLIA "Parcel Geo-Locator Standard."
    - 3. Task Acquire updated orthophotography, either 1"=2640' or 1"=1666' county wide with the possibility of 1"=833' over cities/villages using the standards set in the "National Map Accuracy Standards" or better.
    - 4. Task Research, construct and maintain road centerlines and accompanying table of attributes in accordance with the needs for 911 and highway department needs.
    - 5. Task Research, construct and maintain address mapping for departmental and 911 purposes in accordance with United States Postal Service Standards.
    - 6. Task Acquire metadata for all projects listed in this section in accordance with 2000 WLIA "Content Standard for Geospatial Metadata."
- **5.** Goal Develop and maintain metadata for all Vernon County GIS Layers.
  - **a. Objective** Review GIS layers for compliance with WLIA Content Standard for Geospatial Metadata.
    - 1. Task Develop metadata for all Vernon County Base Layers by December 2006.
    - 2. Task Distribute metadata with any GIS layers delivered from the County Land Information Office.
    - 3. Task Continually update metadata with the most current information available.
    - 4. Task Request metadata on all shapefiles and layers received by the county.

- **6.** Goal Expand existing GIS capabilities of county offices.
  - a. Objective Continue to expand the capability of the Land Information Office to utilize full GIS capability.
    - 1. Task Acquire necessary software and extensions for more sophisticated analyses.
    - 2. Task Utilize interns for development and maintenance of GIS layers.
  - **b. Objective** Expand and Maintain county office existing Land Information.
    - 1. Task Update and Maintain licensing for all software.
    - 2. Task Make available any new and updated GIS layers and orthophotography (utilizing a central server and fiber optic line by 2008).
    - 3. Task Provide continual training for software and hardware available.

#### B. PROGRESS REPORT ON ONGOING ACTIVITIES.

Vernon County has steadily increased its utilization of GIS to upgrade and modernize its Land Records since 1994. The Land Information Committee has adopted an incremental approach to managing this process constrained only by the fiscal resources made available to it. The following is a copy of the handout given to County Board members at a June 1998 presentation to that body:

#### **Brief History of Land Records Modernization in Vernon County**

- November 1993: County determines to modernize land records and begin retaining funds from recording fees.
- February 1994: First meeting of department heads and interested Board members forming the Land Information Committee
- June 1994: County departments return questionnaire on land records needs.
- October 1994: County Board approved Land Records Modernization Plan.
- November 1994: Land Information Committee agrees to join 7-County Digital Orthophotography Consortium to lower costs.
- May 15, 1995: Aerial photography taken of the County by Ayres Associates of Madison.
- October 1995: 7-County Consortium decides to use Intergraph Geographic Information System computer software.
- ......
- **January 1996**: Training in use of computer software and digital orthophotography.
- March 1996: Remonumentation of section corners Pilot Project set for 4 sections in Town of Christiana. Ayres Associates wins Wisconsin Association of Consulting Engineers award for the 7-County Consortium project.
- October 1996: Land Information Committee asks County Board for an annual budget of \$25,000 for remonumentation of section corners in 1997. This is combined with \$20,000 from LIO budget.
  - March 1997: Lampman & Associates begins remonumentation and re-establishment of section corners in Vernon County for the first time in 150 years.
- September 1997: Register of Deeds begins document conversion and modernization program.
- December 1997: Nearly 80 section corners in Towns of Bergen, Hillsboro, and Greenwood established. New brass monuments are set, computer files updated and records of survey work

- **January 1998**: County receives grant funds for Parcel Mapping from Wisconsin Land Information Board.
- March 1998: Vernon County received "Peoples Choice" award at annual Wisconsin Land Information Association (WLIA).
- May 1998: Ayres Associates continues remonumentation project in Towns of Bergen and Greenwood.
- **June 1998**: Over 200 individuals; federal, state and local agencies; and private firms have used the aerial photography, terrain modeling, and interpretation services of the Land Information Office.

.....

- 1998-2004: The County moved from the Intergraph GIS platform to ArcView 3.3, placing stations in the Zoning and Treasurers Offices who were eventually able to access each other in 2003. Staff were trained in its use, however, complete integration of its usefulness was not been realized as no one uses the software full time. Parcel mapping began with the use of student interns. The Town of Hillsboro is mapped and linked to an Access database. A total of eight years of remonumentation has taken place through 2004. The most important accomplishment has been the creation and funding of a County Surveyor position. Vernon County has been without this since 1917. A metadata project was completed in 1999 to assess existing needs. ArcView 3.3 was installed on many Land &Water Conservation Department computers and trainings were held for staff. Many of the staff continue to utilize the software for creation of project-specific shapefiles. In 2000, a bounty program was started to being acquiring accurate section corner coordinates from surveyors and consultants in the area missing this location information; reimbursing them for each corner they submitted. In 2003 a Fidlar&Chambers workstation was placed in the Treasurer's office, facilitating records imaging and data sharing with the Register of Deeds office.
- 2005: ArcGIS 9.1 has been installed in the Land Information Office on a new computer with increased capacity for the more sophisticated software. Publisher, 3D Analyst, and Spatial Analyst have all been installed and are being used for developing new capabilities of existing GIS layers. The wireless 911 grant, if funded, will allow for intensive parcel mapping of the county. Comprehensive addressing is also being planned for the entire county through protocol outlined in an addressing ordinance (currently in draft form). Also, agreements are already in place to distribute digital orthophotography and published map documents to local municipalities using ArcReader software.

#### C. NEW INITIATIVES

#### **Proposed Projects**

- 1. The Treasurer's Office has been authorized to hire additional part-time help. It is anticipated that this will free the person doing property listings to do more parcel mapping in the MicroStation and ArcView environments.
- 2. Continue remonumentation of PLSS, increasing the number done as base funding for LRM activities increase.
- 3. Purchase of GPS equipment to increase the productivity of the County Surveyor function.
- 4. See additional grant funding for PLSS remonumentation as it relates to flood plain zoning mapping possibly utilizing LIDAR elevation data.

#### D. CUSTODIAL RESPONSIBILITIES

- 1. Highway
  - a. Maintain highway plans and Wis-DOT construction plans
- 2. Sheriff
  - a. Coordinate and implement 911 program
- 3. Treasurer
  - a. Tax and assessment records database maintenance and operation
  - b. Parcel mapping and parcel numbering maintenance
  - c. Day-to-Day Supervision of County Surveyor position
- 4. Register of Deeds
  - a. Recording and automation of deeds
  - b. Maintain tract index
- 5. Zoning
  - a. Maintain and automate zoning maps
    - i. Shoreland
    - ii. Floodplain
    - iii. Special use
- 6. Land & Water Conservation
  - a. Soil maps
  - b. Priority Watershed conservation plan maps
  - c. Farmland Preservation conservation plan maps
  - d. House Land Information Office
  - e. Digital Orthophotography maintenance
- 7. Land Information Committee
  - a. Supervision of County Surveyor

#### E. FOUNDATIONAL ELEMENTS AND STATE-WIDE STANDARDS

1. <u>Communication, Education, Training and Facilitated Technical Assistance</u>

Vernon County has access to the WLIP Land Information Clearinghouse and Technical Assistance List Server. The Land & Water Conservation Department has acquired a laptop computer and digital projector which can be used for public presentation of LIO products to meetings of local elected officials, service organizations, private industry groups and others. Emphasis will be placed on increasing the awareness of LIO services among elected officials at the town and municipal level.

#### 2. <u>Geographic Reference Frameworks</u>

Remonumentation of PLSS corners continues to be the main focus of Vernon County's Land Records Modernization program. These corners had been neglected for 150 years until the advent of Land Records Modernization and separate fiscal support from the County Board. Vendors will be selected on a competitive bid basis, with quality control provided by the newly created County Surveyor position.

Additional section corner remonumentation will be implemented depending on the availability of grant funds from the Wisconsin DNR for such activities in mapped flood plain areas. The County has detailed flood plain analysis below its 22 flood control dams.

All section corner remonumentation will be done to standards established in Wisc. Stats Sec. 59.63(1); Sec 60.84(3)(c); Sec. 59.635(2)(b); and Wis. Adm. Code AE 7.08(2)

#### 3. Parcel Mapping / Parcel Administration

Staff was added to the Treasurer's Office in 2000 allowing the property lister to dedicate more time to creating topological parcel maps linked to an Access database conversion of GCS tax data. Parcel identification will conform to the WLIB parcel identification system. It is anticipated that all 30,000 tax parcels will be mapped and identified by 2010.

#### 4. Public Access

The Register of Deeds Office is continuing its transfer of paper deeds to digital format through the Fidlar & Chambers Optical Character Recognition software. Access to office space was greatly enhanced following physical remodeling of office space. All public records (physical and digital) are open to the public for viewing. Reproduction and copying of same are done at cost.

With guidance from WLIA and WLIB/OLIS, a privacy policy will be promulgated that will reflect the rights of public access and the rights to individual privacy.

System security to tax records is maintained by reduced access input screens. Security elements of the Windows NT operating system on other records will be used once public access via the internet is implemented. Vernon County is adopting a "go-slow" approach to web site development mainly due to the lack of clear privacy standards as they apply to public records. It is anticipated that the LIO will be implementing a web site before the end of the current plan period.

#### 5. Zoning Mapping

Digital flood plain maps were created based on the flood insurance rate maps for the County in 1999. Land & Water Conservation Department and Zoning staff will be generating shoreland zoning maps by the 2007. Integration of the Sanitarians septic system database into GIS will be completed by the end of 2010.

#### 6. Soils Mapping

Staff from the Land & Water Conservation Department (LWCD) participated in the Soil Survey Oversight Committee as developed by WLIB/OLIS for acquisition of digitized soil survey information to NRCS standards. Vernon County will continue to pursue updated soil mapping information as it becomes available.

#### 7. Wetland Mapping

The federal Natural Resources Conservation Service and the county Land & Water Conservation Department utilize DNR certified wetland maps from 1985 as a guide to advise landowners about land use in these sensitive areas. For USDA purposes, however, a formal investigation and certification process is done on a case-by-case basis for each affected landowner. The Land Information Office will implement digital formats of the DNR data as a GIS layer by the end of 2005.

#### 8. Institutional Arrangements and Integration

The LIO currently uses an Agreement statement when sharing digital orthophotography, digital terrain models, or any other of the deliverables associated with the aerial photography when supplying such items to State or Federal agencies. The agreement basically states that the agency provided with the information will attribute any published photography or representation drawn from the deliverables to the Land Records Modernization Plan.

Vernon County will remain an active and supportive member of the SouthWest Wisconsin Digital Orthophotography Consortium. This consortium serves as a sounding board, discussion forum and users group, as well as a purchasing block for software, hardware and other GIS needs.

#### 9. Reconciled Election and Administrative Boundary system

The Land Information Office will work with the County Clerk to digitize and automate new electoral boundaries after the 2000 Census based on WI Department of Administration software.

#### 10. Reconciled Street Address and Street Network System

The Sheriff's Department currently maintains the Emergency Numbering System in hard copy form. Local post offices are now allowing the use of fire numbers as addresses, so it is anticipated that automation of this function will be much easier to implement. Any automation will have to be in compliance with and complementary to a proposed E-911 system. Road centerlines and local roads are in digital form now, thanks to a cooperative effort between the LIO and DOT-5.

#### 11. <u>Land Use Mapping</u>

The LIO will integrate the DOR Land Use Classification System into its land use mapping scenario. It is intended that state classifications of land use, regional planning documents, and locally developed map will form the back bone of the GIS land use layer.

#### 12. Natural Resources

The LIO will continue to coordinate and integrate with other layer holders such as the Wisconsin DNR, Natural Resources Conservation Service, Kickapoo Reserve, Trout Unlimited, Wisconsin Department of Transportation and others.

#### 13. Database Design

Vernon County uses the MicroSoft Access database application to link with topological elements in its ArcView based GIS. As more staff time is dedicated to GIS, there will be a more sophisticated and integrated approach to linking of land records. A schema has been developed, and records created follow that schema.

#### 14. <u>Infrastructure and Facility Management</u>

None adopted at this time

#### F. INTEGRATION AND COOPERATION

The Vernon County LIO has developed excellent working relationships with WIS-DOT-5, Mississippi River Regional Planning Commission, City of Westby, City of Hillsboro, Towns of Bergen, Coon and Christiana, and the Kickapoo Reserve Management Board. Our intent is to build upon those relationships, and foster development with others as the need arises. The primary data shared is orthophotography, vector files (existing and project-created) and terrain analysis.

#### G. TECHNICAL STANDARDS NOT ASSOCIATED WITH FOUNDATIONAL ELEMENTS

Vernon County has and will continue to adhere to all applicable metadata, imaging, procurement and IT infrastructure standards.

#### H. ADMINISTRATIVE STANDARDS NOT ASSOCIATED WITH FOUNDATIONAL ELEMENTS

- 1. Vernon County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes.
- 2. Vernon County agrees to permit the Wisconsin Land Information Board access to books, records and projects for inspection and audit including unannounced audits by the WLIB.
- 3. Vernon County agrees to provide an Annual Status Report of Plan Progress requested herein and to keep the Plan up to date. The report will be administered electronically.
- 4. The WLIB agrees to facilitate technical assistance to Vernon County including an on-line Technical Assistance Service.
- 5. The WLIB agrees to maintain and distribute an inventory of land information and land information systems for the State. This will be provided through an electronic clearinghouse.
- 6. Development and implementation of an acceptable Plan confers certain benefits on local government within Vernon County, including continued eligibility for WLIP funding. A self-approving peer review process will be used to assess Plan acceptability by the land information community.
- 7. The WLIB agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
- 8. The WLIB agrees to make available electronically an Annual report regarding the status of the Wisconsin Land Information Program and the activities of the WLIB.

### RESOLUTION No. 2005-29 Approval of the Updated Land Records Modernization Plan

WHEREAS, A Land Records Modernization Plan was created and approved in 1994 to allow Vernon

County's participation in the Wisconsin Land Information Program; and,

WHEREAS, A 1999 Plan Update was approved under Resolution No. 2000-11 and replaced the 1994

Plan as the new Vernon County Land Records Modernization Plan; and,

WHEREAS, This 2005 Plan is an update to the 1999 Land Records Modernization Plan and replaces

the 1999 Plan,

NOW THEREFORE BE IT RESOLVED, that the Vernon County Board of Supervisors does hereby

approve this updated Vernon County Land Records Modernization Plan

Submitted by the Land Information Committee of the Vernon County Board of Supervisors May 4, 2005

ЛМ PARR, BOARD

JIM SERVAIS, BOARD

DEAN STEINMETZ, BOARD

RAYMOND MOSER BOARD

JUDY WILMES, LIC CHAIR

Fonna Spaet KONNA SPAETH, R.O.D.

TRENT STRANG, ZONING

HUGH HARPER, ASSESSOR

BACHEL HANSON TREASURER

LEE NERISON, BOARD

JEFF BASZINGS, LWCD

CURT CUMMER, SURVEYOR

#### RESOLUTION No. 2000-11

A	RESOLUTION No. #Approval of the Updated Land Record		
WHEREAS,		n was created and approved in 1994 to n in the Wisconsin Land Information	
WHEREAS,	this 1999 Plan is an update to the 1994 Plan and replaces the 1994 Plan;		
NOW THEREFO	ORE BE IT RESOLVED, that the Values hereby approve this updated Value Modernization Plan	Vernon County Board of Supervisors Vernon County Land Records	
Submitted by the January 12, 2000	Land Information Committee of the V	Vernon County Board of Supervisors	
Betty Bolton, R.O.  TRENT STRANG, ZO	NING HUGH HARPER, PRIVATE	RACHEL HANSON, DEP. TREAS.  Offin Officsky HEFE HASTINGS, LCD  VIRGIL HANOLD, HIGHWAY	
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EUGENE LOEFFLER	, BOARD JACK ROBINSON, BOARD	ROBERT KELBEL, CHAIR	
document is a t	ERNON  Iverson, County Clerk of Vernon Countrue and correct copy of the original resoluted by the Vernon County Board of 20.	ty do hereby certify that the attached solution required by law to be in my	

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Sharon A. Solverson, Vernon County Clerk

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